U.S. Application No.: 10/586,796

Attorney Docket No.: 39090-6&
Conf. No. 937&

Amendments to the Claims:

Please replace the claims, including all prior versions, with the listing of claims below.

Listing of Claims:

1– 16. (canceled)

17.   (currently amended) A method for improving traffic distribution in a communication network with multipath routing, <u>wherein in the network traffic to a destination is distributed over a number of routes or paths and forwarded to the destination, the method</u> comprising:

          providing a plurality of nodes and links in the communication network, wherein one node of the communication network having a plurality of outgoing links, which correspond to alternative paths for routing to a destination and to which traffic to the destination can be distributed;

          assigning to the outgoing links distribution weightings for distribution of the traffic to the destination; and

          adjusting the distribution weightings according to a parameter related to the load or availability of the individual links, with, in the case of two links with different parameter values, the distribution weighting of the link with the higher parameter value being reduced in relation to the distribution weighting of the other link.

18.   (previously presented) The method according to claim 17, wherein the distribution weightings are adjusted according to a gap between the parameter for the respective link and a mean value for the parameter taken over the plurality of outgoing links.

19.   (currently amended) The method according to claim 18, wherein each of the plurality of links, the parameter value of which is different from the mean value, the distribution weightings are adjusted, with the distribution weightings of links, the parameter value of which is above the mean value, being reduced and the distribution weightings of links, the parameter value of which is <u>below</u> the mean value being

increased.

20. (previously presented) The method according to claim 19, wherein the distribution weightings are increased or reduced in proportion to the gap between the parameter value for the respective link and the mean value.

21. (previously presented) The method according to claim 17, further comprising iteratively adjusting the distribution weightings, with an adjustment of the distribution weightings being carried out with each step.

22. (previously presented) The method according to claim 21, further comprising: initializing the distribution weightings with start values; repeating the iteration; and using the distribution weightings resulting after the repeated iterations for routing in the communication network to the destination.

23. (previously presented) The method according to claim 21, wherein when the distribution weightings are modified, an attenuation variable that is a function of a number of the iteration is used, bringing about a reduction in the modification of distribution weightings that increases with the number of iterations.

24. (previously presented) The method according to claim 21, further comprising: defining the parameter during the first iteration by an absolute traffic load or a relative traffic load related to a link bandwidth; and modifying the value of the parameter during the iterations for the next iteration, with the modification taking into account the traffic transported via the link to the destination.

25. (previously presented) The method according to claim 24, further comprising adding the traffic transported via the link to the destination multiplied by a factor.

26. (previously presented) The method according to claim 17, wherein the traffic distribution in the communication network is recalculated using the resulting distribution

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weightings.

27. (previously presented) The method according to claim 17, wherein the method is implemented for a plurality of nodes in communication network, at which traffic distribution takes place, and wherein the method is implemented for a plurality of destinations.

28. (previously presented) The method according to claim 17, wherein the parameter is defined by an absolute traffic load, a relative traffic load related to the link bandwidth, a traffic-related costs incurred during link usage, a link availability, a transit time of the respective link or a load capacity of the end nodes of the respective link.

29. (previously presented) The method according to claim 17, wherein the distribution weightings of a node to a destination are standardized and this standardization is maintained during modification, and wherein the distribution weightings for multipath routing are adjusted in the context of a ECMP (Equal Cost Multi Path) method.

30. (previously presented) The method according to claim 17, wherein the method is implemented in a router.

31.(currently amended) A method for traffic distribution in a communication network having multipath routing, <u>wherein in the network traffic to a destination is distributed over a number of routes or paths and forwarded to the destination, the method</u> comprising:

      providing a first network node operatively connected to a plurality of subsequent network nodes, each connection having a link that is an outgoing link with respect to the network node, whereby a plurality of outgoing links are provided, the connections providing paths for distributing the traffic to a destination; and

      for each outgoing link:

      assigning a distribution weighting for the traffic distribution to the respective link; and

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adjusting the distribution weighting according to a value related to the availability of the respective link, the weighting adjusted such that when the value of the respective link is greater than the value of a different outgoing link the weighting of the respective link is reduced in relation to the weighting of the different outgoing link.

32.   (previously presented) The method according to claim 31, wherein the value is based on the availability or load for the corresponding link.

33.   (previously presented) The method according to claim 31, wherein the distribution weighting is adjusted according to a gap between the value for the respective link and an average of the values for the plurality of links.

34.   (currently amended) The method according to claim 33, wherein the distribution weighting is adjusted for each link having a value that is different from the average, wherein the distribution weighting is reduced when the value is greater than the average, and wherein the distribution weighting is increased when the value is less than the average. [[and]]

35.   (previously presented) The method according to claim 34, wherein the distribution weighting is increased or reduced in proportion to the gap between the value for the respective link and the average.

36.   (previously presented) The method according to claim 31, further comprising repeating the adjustment step.

37.   (previously presented) The method according to claim 36, further comprising: initializing the distribution weightings with a start value, repeating the adjustment step a plurality of times, and using each distribution weighting resulting after the plurality of repetitions for routing to the destination.

38.   (previously presented) The method according to claim 36, further providing an

attenuation variable that is a function of the number of the iteration, wherein the attenuation variable is used in adjusting the distribution weighting, the attenuation variable providing reduction in the adjustment of each distribution weighting that increases with the number of iterations.

39.   (previously presented) The method according to claim 36, wherein the value is defined during the first iteration by the absolute traffic load or the relative traffic load related to a bandwidth or the relative link, and wherein the value is modified during the iterations for the next iteration, with the modification taking into account the traffic transported via the link to the destination.

40.   (previously presented) The method according to claim 39, further comprising the modification is effected by adding the traffic transported via the link to the destination multiplied by a factor.

41.   (new) A method for traffic distribution in a communication network having multipath routing, wherein in the network traffic to a destination is distributed over a number of routes or paths and forwarded to the destination, the method comprising:
        providing a first network node operatively connected to a plurality of subsequent network nodes, each connection having a link that is an outgoing link with respect to the network node, whereby a plurality of outgoing links are provided, the connections providing paths for distributing the traffic to a destination; and
        for each outgoing link:
            assigning a distribution weighting for the traffic distribution to the respective link; and
            adjusting the distribution weighting according to a value related to the load of the respective link, the weighting adjusted such that when the value of the respective link is greater than the value of a different outgoing link the weighting of the respective link is reduced in relation to the weighting of the different outgoing link.